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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,521	03/01/2004	Steven M. Viny	DAL-101	9908

7590
Howard M. Cohn
Suite 220
21625 Chagrin Blvd.
Cleveland, OH 44122

03/22/2006

EXAMINER

MILLER, JONATHAN R

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,521

Applicant(s)

VINY, STEVEN M.

Examiner

Jonathan R. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/1/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20040301</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 4 recites the limitation "the cylinder" in line 2. There is insufficient antecedent basis for this limitation in the claim.
4. Claims 7 – 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 7 recites the limitation "the side elongate elements" in line 3. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 7 recites the limitation "the two side elongate elements" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

7. Claim 1 is objected to because of the following informalities: approximately is misspelled. Appropriate correction is required.
8. Claim 14 is objected to because of the following informalities: respect is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 4, 5, 6 and 12 – 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Roman. The reference discloses a first conveyor system having a conveyor belt (18) wrapping around a roller (24) at an end of the conveyor belt, and conveying the pieces shredded trash, in a direction, to the end of the first conveyor system (Fig. 4); an air manifold (116) positioned underneath and approximately at the end of the conveyor belt for providing an air stream (Fig. 4) which is generally in the direction of travel of the conveyor belt; and a splitter plate system (164) disposed at a position forward of the end of the conveyor, comprising an elongate element (166) which is essentially parallel to the roller at the end of the conveyor.

11. With regards to claim 4, the reference further discloses a splitter sheet (158, 160) hanging below the cylinder (166), defining an accumulation area (74) on one side of the splitter sheet which is proximal the first conveyor system; and an accumulation area (76) on another side of the splitter sheet which is distal the first conveyor system.

12. With regards to claim 5, the reference further discloses the accumulation area has a second conveyor system for removing the lighter materials that accumulate on the side of the splitter sheet which is distal the first conveyor system (Fig. 1).

13. With regards to claim 6, the reference further discloses the conveyor belt is disposed at an angle "a" with respect to horizontal; and the angle is approximately 30-60 degrees (Fig. 4).

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14. With regards to claim 12, the reference further discloses conveying the pieces of shredded trash (col. 1, lines 5+), in a direction, to an end of a conveyor; at the end of the conveyor, providing an airstream in the direction; disposing a bar and a splitter sheet forward of the end of the conveyor; and collecting heavier pieces of material in a first accumulation area on one side of the splitter sheet which is proximal the end of the conveyor and collecting lighter pieces of material in a second accumulation area on an opposite side of the splitter sheet which is distal the end of the conveyor (Fig. 4).

15. With regards to claim 13, the reference further discloses the bar (166) is a cylinder, and further comprising: rotating the cylinder (col. 7, lines 54+).

16. With regards to claim 14, the reference further discloses controlling an amount of pieces which are collected in the second accumulation area by adjusting at least one of the following parameters: a speed of the conveyor, an angle of the conveyor with respect to horizontal, an angle of the airstream with respect to the angle of the conveyor, a pressure of the airstream, a position of the airstream relative to the end of the conveyor, a distance between the bar and the conveyor, and a height of the bar with respect to a height of the conveyor (col. 8, lines 19+).

17. Claims 1 – 4, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilbur et al. The reference discloses a first conveyor system having a conveyor belt (44) wrapping around a roller (54) at an end of the conveyor belt, and conveying the pieces, in a direction, to the end of the first conveyor system; an air manifold (col. 3, lines 64+) positioned underneath and approximately at the end of the conveyor belt for providing an air stream which is generally in the direction of travel of the conveyor belt; and a splitter plate system (74) disposed at a position forward of the end of the conveyor, comprising an elongate element (42) which is

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essentially parallel to the roller at the end of the conveyor. "Shredded trash" is intended use and not given patentable weight. Examiner contends that the air stream is generally in the direction of travel of the conveyor belt. What is the general direction of travel of the conveyor belt? At some point they are in the same direction as the belt passes around the roller. Furthermore, Examiner contends that the manifold is sufficiently positioned underneath the conveyor belt as shown in Fig. 1.

18. With regards to claim 2, the reference further discloses the elongate element is a cylinder (42).

19. With regards to claim 3, the reference further discloses the roller rotates in a direction; and the cylinder rotates (col. 4, lines 8+).

20. With regards to claim 4, the reference further discloses a splitter sheet (70) hanging below the cylinder, defining an accumulation area (68) on one side of the splitter sheet which is proximal the first conveyor system; and an accumulation area (72) on another side of the splitter sheet which is distal the first conveyor system.

21. With regards to claim 7, the reference further inherently discloses a structural frame having opposite side elements and a bottom elongate element extending between the side elongate elements; and a splitter sheet hanging from the two side elongate elements. Examiner contends that the recited limitations must be present in the reference although the basic structure is not shown in the figures.

22. With regards to claim 8, the reference further discloses the bottom elongate element (24) comprises a cylinder.

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23. Claims 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaufmann. The reference discloses a structural frame having opposite side elements (68) and a bottom elongate element (68) extending between the side elongate elements; and a splitter sheet (65) hanging from the two side elongate elements.

24. With regards to claim 8, the reference further discloses the bottom elongate element comprises a cylinder (col. 5, lines 1+).

25. With regards to claim 9, the reference further discloses means (79) for raising and lowering the structural frame.

26. With regards to claim 10, the reference further discloses means (79) for moving the structural frame towards and away from a conveyor system (20). Examiner contends that the sides of the hopper are a conveyor system.

27. With regards to claim 11, the reference further discloses the structural frame is a generally rectangular structural frame having a top elongate element (69) and two opposite side elongate elements (68) extending downwards from opposite ends of the top elongate element, and a bottom elongate element (66 - adjacent elements 68) extending between bottom portions of the side elongate elements, thereby forming a generally rectangular window; and the splitter sheet hangs from bottom ends of the two side elongate elements (Fig. 5). What constitutes an elongate element? What does it mean to extend between bottom portions of the side elongate elements? Examiner contends that these limitations are met by the reference as the bottom elements have a length and they extend between bottom portions of the side elements individually.

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claims 1 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilbur et al.

The reference discloses a first conveyor system having a conveyor belt (44) wrapping around a roller (54) at an end of the conveyor belt, and conveying the pieces, in a direction, to the end of the first conveyor system; an air manifold, and a splitter plate system (74) disposed at a position forward of the end of the conveyor, comprising an elongate element (42) which is essentially parallel to the roller at the end of the conveyor. “Shredded trash” is intended use and not given patentable weight.

30. The reference fails to disclose the manifold positioned underneath and at the end of the conveyor belt for providing an airstream that is generally in the direction of the conveyor belt. Examiner takes Official Notice that repositioning of the manifold to propel one portion of the mixture instead of retarding a second portion of the mixture is well known in the art. At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a propelling manifold to prevent damage to the second portion.

31. With regards to claim 2, the reference further discloses the elongate element is a cylinder (42).

32. With regards to claim 3, the reference further discloses the roller rotates in a direction; and the cylinder rotates (col. 4, lines 8+).

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33. With regards to claim 4, the reference further discloses a splitter sheet (70) hanging below the cylinder, defining an accumulation area (68) on one side of the splitter sheet which is proximal the first conveyor system; and an accumulation area (72) on another side of the splitter sheet which is distal the first conveyor system.

34. With regards to claim 5, the reference fails to explicitly disclose a second conveyor system. Examiner takes Official Notice that a second conveyer positioned in the accumulation area is well known in the art to provide transport of sorted items. At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a take-away conveyor to provide transport of the sorted items without human contact.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan R. Miller whose telephone number is (571) 272-6940. The examiner can normally be reached on M-F: 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy A. Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jrm

Kathy Matecki
KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600